



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,392	10/24/2003	Jeffrey P. Snover	MSI-1738US	1997
22801	7590	12/11/2007	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			CAO, DIEM K	
			ART UNIT	PAPER NUMBER
			2194	
			MAIL DATE	DELIVERY MODE
			12/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/693,392

Applicant(s)

SNOVER ET AL.

Examiner

Diem K. Cao

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-38 are pending. Applicant has amended claims 1, 7, 12-13, 15-19, 28-29, 31 and 34.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-18, 29-36 and 38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a signal directly or indirectly by claiming a medium and the Specification recites evidence where the computer readable medium is define as a “*wave*” (such as a carrier wave), see specification, page 7, lines 7-19. In that event, the claims are directed to a form of energy which at present the office feels does not fall into a category of invention.

Although in the remarks, under section “III. Rejection Under 35 U.S.C. 101”, on page 11, Applicant argued that the claims have been amended to recite “a computer readable storage medium” instead of “a computer readable medium”, however, such changes are not reflect in the submitted claims. Therefore, the rejection is maintained.

See MPEP 2106.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-2, 4-8, 10, 12-18, 29-31, 33, 36 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Little et al. (U.S. 6,907,572 B2).**

As to claim 1, Little teaches a computer readable medium encoded with a data structure, comprising:

- a parameter definition for at least one input parameter (private String [] argument_types; col. 8, lines 55-60), the parameter definition being configured to enable identification of an appropriate input for the at least one parameter (The Java class CLIAction translates arguments from the input string; col. 9, lines 16-18), wherein the parameter definition is created via a class declaration within the data structure (CLIAction class; col. 8, lines 55-56), and
- an instruction-based mechanism configured to use the parameter definition to identify the appropriate input for the at least one input parameter from information included in an input source (The Java class ... then invokes the object and method required for that input; col. 9, lines 16-18 and For each of the types in the ... command line; col. 11, lines

14-22 and 26-44), the input source not comprising a live object (command line; col. 11, lines 21-22),

- wherein the instruction-based mechanism is further configured to process the at least one input parameter based on the identified appropriate input when the data structure becomes instantiated into an object (Upon receiving the serialized input ... into the actual object, method and constructors that are used to invoke the method; col. 10, lines 53-67 and For each of the types in the ... command line; col. 11, lines 14-22 and 26-44).

As to claim 2, Little teaches the input source comprises a string (command line; col. 11, lines 21-22).

As to claim 4, Little teaches the string comprises a part of a command string entered on a command line (command line; col. 11, lines 21-22).

As to claim 5, Little teaches wherein the parameter definition comprises a data type (String; col. 8, line 59) and a name for the expected input parameter (time, day of month, month and year; col. 7, lines 58-60).

As to claim 6, Little teaches wherein the information comprises a value (For example consider the day of the month argument for the "clock set" command ... to this argument; col. 13, line 65 – col. 14, line 3).

As to claim 7, see rejection of claim 5 above. Little further teaches wherein the mechanism further coerces the value having a first data type into a converted value having a second data type specified in the definition (A string input to this argument that cannot be parsed into an integer is invalid; col. 13, line 67 – col. 14, line 1).

As to claim 8, Little teaches the input source comprises a set of objects (show, show clock details; col. 12, lines 15-20).

As to claim 10, Little teaches wherein the input source comprises a precisely parseable stream (A string input to this argument that cannot be parsed into an integer is invalid; col. 13, line 67 – col. 14, line 1).

As to claim 12, Little teaches wherein the mechanism further identifies and populates each expected input parameter for each record within the input source (For each of the types in the ... command line; col. 11, lines 14-22 and 26-44).

As to claim 13, Little teaches a mapping mechanism that is operative to associate a mapped name with the input parameter, wherein identifying the information is based on the mapped name ("string name"; col. 9, lines 47-62 and col. 7, lines 17-52).

As to claim 14, Little teaches wherein the mechanism comprises a method inherited from a class provided within a runtime environment (method_name; col. 10, lines 55-67).

As to claim 15, Little teaches wherein the data structure is a public class (CLIAction class; col. 10, line 54 - col. 11, line 10).

As to claim 16, Little teaches wherein the input parameters are public parameters (col. 11, lines 33-44).

As to claim 17, Little teaches a plurality of parameter definitions, each parameter definition corresponding to one of a plurality of input parameters, wherein at least one of the parameter definitions is configured to be indirectly associated with the data structure (an `<action>` tag content in the XML CLI ... a Java class CLIAction ... private String [] argument_types; col. 8, lines 45-60 and This includes defining the Java class ... mapping in XML; col. 11, lines 58-65).

As to claim 18, Little teaches wherein the indirect association between the at least one of the parameter definitions and the data structure comprises a reference to an XML based document that enables identification of the corresponding input parameter (XML CLI description files; see Figs. 2-3 and associated text).

As to claim 38, Little teaches wherein the live object is of a data type having a method, the method being directly invocable when processing the expected input parameter (see Fig. 20).

As to claim 29, Little teaches

- a name identifying an application that is included in a declared parent class provided by an object-based environment (CLI application; col. 3, lines 16-18, and col. 4, lines 6-7 and col. 7, lines 35-41),
- at least one member configured to receive one or more sets of input, wherein each set of input comprises at least one live object (When a user ... CLI command ... action; col. 5, lines 55-58 and token on the command line; col. 11, lines 20-21),
- a method associated with the one or more sets of input (method; col. 11, lines 14-15),
- wherein the declared parent class is configured to provide processing that executes the method for each set of input received for the at least one member when the name of the application is invoked (when the command “show clock” command ... in the action; col. 5, lines 59-67).

As to claim 30, Little teaches wherein the at least one member comprises an expected input parameter (time, day of month, month and year; col. 7, lines 58-60).

As to claim 31, Little teaches wherein the declared parent class further provides validation processing on each set of input for the expected input parameter and does not execute the method for one set of input if the one set fails the validation processing (Argument validation ... throwing an ArgumentException instance; col. 13, line 54 – col. 14, line 25).

As to claim 33, Little teaches wherein each set of input includes an identifier that associated the input with the member (object_name, method_name; col. 10, lines 60-61 and col. 12, lines 15-29).

As to claim 36, Little teaches wherein the command is invoked via an object-based command line environment (When a user ... CLI command ... action; col. 5, lines 55-58 and token on the command line; col. 11, lines 20-21).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 19-23, 26, 28 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillis et al. (U.S. 6,286,035 B1) in view of Little et al. (U.S. 6,907,572 B2).**

As to claim 19, Gillis teaches a computer-executable method for populating parameters declared within a data structure (abstract), the method comprising:

obtaining an expected name for a parameter, the expected name being assigned in a declaration for the parameter within a data structure (determined whether an associated parameter description is found using the unique key of the received parameter; col. 7, lines 60-62),

identifying a label within an input source correlating to the expected name (the function

finds the associated received parameter using the unique key of the parameter descriptor; col. 8, lines 17-20), the input source not comprising a live object (invalid command message; col. 7, lines 52-55),

retrieving a value associated with the label (the value of the received parameter; col. 8, lines 29-30), and

assigning the value to the parameter (the value of the received parameter ... message structure; col. 8, lines 35-43).

Gillis does not explicitly teach the expected name being assigned in a class declaration. However, Little teaches the expected name being assigned in a class declaration (time, day of month, month and year; col. 7, lines 58-60 and CLIAction class; col. 8, lines 50-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Little to the system of Gillis because Little teaches a method that maps command to objects and method defined in Java classes, and using this method will shield users from changes or version upgrades applied to the system (col. 14, lines 31-44).

As to claim 20, Gillis teaches wherein the expected name and label are identical (unique key; col. 7, lines 60-63).

As to claim 21, Gillis teaches providing mapping information that defines an alias name for the expected name and identifying the label based on the alias name (unique key; col. 7, lines 60-63).

As to claim 22, Gillis teaches wherein the input source comprises a command string entered on a command line (col. 1, lines 29-33) and the alias name is provided within the command string (unique key; col. 7, lines 60-63).

As to claim 23, Gillis teaches wherein the alias name is provided within a data store (the function finds the associated received parameter using the unique key of the parameter descriptor; col. 8, lines 17-20).

As to claim 26, Gillis teaches wherein the input source comprises a command string entered on a command line (col. 1, lines 29-33).

As to claim 37, Gillis teaches validating the value and wherein assigning the value to the parameter occurs if the value passes the validation (col. 8, lines 28-43).

As to claim 28, it is the same as the method claim 19 except it is a computer system claim and is rejected under the same ground of rejection.

7. Claims 32 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Little et al. (U.S. 6,907,572 B2) in view of Gillis et al. (U.S. 6,286,035 B1).

As to claim 32, Little does not explicitly teach wherein the application comprises a command in a pipeline of commands and the set of input comprises results from a previous

command in the pipeline of commands. However, Gillis teaches wherein the application comprises a command in a pipeline of commands and the set of input comprises results from a previous command in the pipeline of commands (col. 1, lines 30-37 and col. 4, line 65 - col. 5, line 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Gillis to the system of Little because Gillis provides a message parsing and validation engine which is versatile and easily expandable for use in an operations support system that manages a network (col. 2, lines 14-17).

As to claim 34, Little does not teach wherein the parent class further provides a mapping process that allows a specified alias for the identifier. However, Gillis teaches wherein the parent class further provides a mapping process that allows a specified alias for the identifier (unique key; col. 7, lines 56-65 and col. 8, lines 15-20).

As to claim 35, Little does not teach wherein the application comprises a command and the specified alias is provided as an argument to the command when the command is invoked. However, Gillis teaches wherein the application comprises a command (doValidate()) routine with a appropriate argument; col. 7, lines 42-44) and the specified alias is provided as an argument to the command when the command is invoked (unique key of the received parameter; col. 7, lines 60-63).

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little et al. (U.S. 6,907,572 B2) in view of Lee (U.S. 6,405,365 B1).

As to claim 3, Little does not teach the string comprises a part of a script. However, Little teaches the CLI can take input from a file or any kind of stream (col. 9, lines 43-46). Lee teaches the string comprises a part of a script (next instruction in Instructions File 150; col. 8, lines 14-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Lee to the system of Little because Lee teaches an alternate method to validate not only a single command but a file of command, thus it would improve the performance of the Little system.

9. Claims 25, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillis et al. (U.S. 6,286,035 B1) in view of Little et al. (U.S. 6,907,572 B2) further in view of Lee (U.S. 6,405,365 B1).

As to claim 25, Gillis does not teach wherein the input source comprises a database table. However, Lee teaches wherein the input source comprises a table (Instructions File 150; col. 8, lines 14-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Lee to the system of Gillis because Lee teaches data in the database table can be used in the system of Gillis, not only from command line, thus, it would improve the performance of Gillis system.

As to claim 27, Gillis does not teach the input source comprises a script. However, Lee teaches the string comprises a part of a script (next instruction in Instructions File 150; col. 8,

lines 14-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Lee to the system of Little because Lee teaches an alternate method to validate not only a single command but a file of command, thus it would improve the performance of the Little system.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little et al. (U.S. 6,907,572 B2) in view of Lee (U.S. 6,405,365 B1) further in view of Jones (Parse and Validate Command Line Parameters with VB.NET).

As to claim 9, Little and Lee do not teach wherein the set of objects comprises .NET objects. However, Jones the set of objects comprises .NET object (In VB.NET, you can obtain the command line passed to the VB.NET via the Command() function; page 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Jones to the system of Little and Lee because Jones teaches how to parse and validate .NET command line, thus, the system of Gillis can be improve to validate new type of objects.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little et al. (U.S. 6,907,572 B2) in view of Allen (U.S. 6,658,625 B1).

As to claim 11, Little do not teach wherein the precisely parseable stream comprises an XML-based document. However, Allen teaches a parser parses and validates an XML document (col. 19, lines 35-36). It would have been obvious to one of ordinary skill in the art at the time

the invention was made to apply the teaching of Allen to the system of Little because Allen teaches a method to parse and validate XML documents, thus the system of Gillis would be improve because it not only can process command but also XML documents.

12. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gillis et al. (U.S. 6,286,035 B1) in view of Little et al. (U.S. 6,907,572 B2) further in view of Allen (U.S. 6,658,625 B1).

As to claim 24, Little does not teach wherein the input source comprises an XML document. However, Allen teaches a parser parses and validates an XML document (col. 19, lines 35-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Allen to the system of Little because Allen teaches a method to parse and validate XML documents, thus the system of Gillis would be improve because it not only can process command but also XML documents.

Response to Arguments

13. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 8:30AM - 4:30PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/693,392
Art Unit: 2194

Page 16

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC
December 7, 2007


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER